

A NEW STENOGYNE (LABIATAE)  
HAWAIIAN PLANT STUDIES 84

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There are two large genera of Labiatae native to the Hawaiian Islands, Phyllostegia, and Stenogyne. In the latter a new species has now been discovered at Pohakuloa on the island of Hawaii. This area lies in the saddle between the two high volcanoes, Mauna Kea and Mauna Loa. It is an area of low rainfall on rough, ancient lava flows. The plant cover is mostly low scrub or forest, the latter mostly in "kipukas," or islands of older landsurrounded by the newer lava flows. It is evident that the vegetation here has never been lush, and it has suffered from the grazing of feral goats and from military manouvers and canon fire, for it is now a military training area. The new Stenogyne was found in a single fissure in the lava in a forested "kipuka," and there it is partially protected from the destructive agents that are decimating the flora of the area.

Stenogyne pohakuloaensis sp. nov. (sect. Microphyllae)

Fig. 1.

Diagnosis Holotypi: Liana suffrutescens diffuse ramosa est, ramulis lateralibus brevibus foliosis et floriferis 0.3-1 mm diametro quadratis cum 4 angulis rotundatis valleculis interpositis anguste U-formatis sparse albo-pilosulis tarde subglabratiss, internodis 7-75 mm longis, nodis paullo incrassatis et pilosulo-cinctis, cicatricibus foliorum 0.8-1 mm latis lunatis elevatis badiis, petiolis 3-7 mm longis in 2 marginibus superis pilosulo-ciliatis, laminis ramae principali 25-27 mm longis 6-8 mm latis anguste lanceolatis crenatis, laminis ramularum lateralium 8-22 mm longis 5-11 mm latis subcoriaceis glabris ellipticis apice obtuso basi breve cuneata marginibus crenatis supra viridibus et nervis impressis infra viridibus et nervis elevatis nervis secundariis 3 in dimidio quoque curvatis adscendentibus, floribus 2 in 2-3 nodis superis foliosis ramularum lateralium, bracteis 1.5 mm longis linearibus sparse pilosulis, pedicellis 2-2.5 mm longis pilosulis, calycibus in flore 5.5-7 mm longis viridibus campanulatis in 10 nervis hirsutulis tubo 3 mm longo labia supera 3.5-4 mm longa cum 3 lobis 1.5 mm longis ovatis, labia infera 1.5-1.8 mm longa cum 2 lobis ovatis acutis, corollis 13-14 mm longis in basi 0.8 mm diametro

sursum majoribus et in fauce 3 mm diametro extra minute puberulis licet spuma lacto-coloratis, labia supera 5 mm longa elliptica, labia infera 2.5 mm longa 3-lobata, lobis lateralibus 2.8 mm longis latisque oblique ovatis acutis, loba infera 2.8 mm longa 2.5 mm lata ovata, filamentis ad labiam superam aequantibus et per 10 mm cum tubo corollae adnatis apicibus liberis 3.3 mm longis glabris, antheris 1.2 mm longis ellipsoideis dimidiatis, ovario 0.8 mm longo glabro, stylo 6 mm longo glabro, 2 stigmatibus 0.3 mm longis subulatis divergentibus, (fructibus incognitis).

Diagnosis of Holotype: Suffrutescent vine, diffusely branched, and leafy and floriferous on short lateral branchlets; leafy branchlets 0.3-1 mm in diameter, square, with 4 rounded angles and narrow U-shaped intervening valleys, sparsely white pilosulous, later subglabrate; internodes 7-75 mm long; nodes slightly enlarged, and with a pilosulous ring; leaf scars 0.8-1 mm wide, lunate, elevated, brown; petioles 3-7 mm long, pilosulous ciliate on the 2 upper rims; blades of main branch 25-27 mm long, 6-8 mm wide, narrowly lanceolate, crenate; blades of lateral branchlets 8-22 mm long, 5-11 mm wide; subcoriaceous, glabrous, elliptic, the apex obtuse, the base shortly cuneate, the margins crenate, above green, and with impressed veins, below green and with elevated veins, secondary veins 3 in each half, curved ascending; flowers at the 2-3 upper leafy nodes of lateral branchlets, 2 at a node; bracts 1.5 mm long, linear, sparsely pilosulous; pedicels 2-2.5 mm long, pilosulous; calyx in flower 5.5-7 mm long, green, campanulate, hirsutulous on the 10 nerves, the tube 3 mm long, the upper lip 3.5-4 mm long, with 3 lobes 1.5 mm long, ovate, the lower lip 1.5-1.8 mm long, the 2 lobes ovate, acute; corolla 13-14 mm long, 0.8 mm in diameter at base, enlarging gradually and 3 mm in diameter at the throat, minutely puberulous without, apparently cream-colored, the upper lip 5 mm long, elliptic, the lower lip 2.5 mm long, 3-lobed; lateral lobes 2.8 mm long and wide, obliquely ovate, acute; filaments about equaling the upper lip, adnate to the corolla tube for 10 mm, the free tips 3.3 mm long, glabrous; anthers 1.2 mm long, the cells ellipsoid, dimidiate; ovary 0.8 mm long, glabrous; style 6 mm long, glabrous; 2 stigmas 0.3 mm long, subulate, diverging; (fruit unknown).

Holotypus: Hawaiian Islands, Hawaii Island, Pohakuloa Training Area, New Bobcat Trail, 5,200 feet elev., Pahoehe Kipuka, with open scrub Metrosideros and Santalum forest, near Wikstroemia and Myrsine lanaiensis, in dense shade in deep lava crack, 8 Jan. 1977, C. H. Lamoureux 4,966 (BISH).

Specimens Examined: Hawaiian Islands, Hawaii Island, same locality and data, F. R. Warshauer 794 (BISH).

Discussion: S. pohakuloaensis is evidently most closely related to S. scandens Sherff, of the island of Hawaii, a species with the flowers 6 at a node; calyx 6-8 mm long in flower, puberulent above, scarcely so at base, the tube 4-5 mm long, the lobes lanceolate; corolla 18 mm long, ascending pilosulous without, the lower lip 5 mm long; style 24 mm long; and the blades 22-36 mm long, 11-20 mm wide, pilosulous below. S. pohakuloaensis has the flowers 2 at a node; calyx 5.5-7 mm long in flower, hirsutulous on the 10 nerves, the tube 3 mm long, the lobes ovate; corolla 13-14 mm long, minutely puberulous without, lower lip 2.5 mm long; style 6 mm long; and the blades of the lateral branches 8-22 mm long, 5-11 mm wide, glabrous.

The new epithet is formed from the name of the type locality, Pohakuloa, and -ensis, the Latin adjectival place suffix.

#### Legend

Fig. 1. Stenogyne pohakuloaensis St. John, from holotype. a, habit, X 1; b, c, flower, X 3; d, stamen, X 5; e, pistil, X 5.

Fig. 1.

